SHAVALA MADHU SEKHAR

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PROFESSIONAL SUMMARY

Highly motivated Software Engineer with hands-on experience in Python, UI/UX basics, and web technologies. Currently working at Lyros Technologies, contributing to real-time software development and machine learning projects. Strong foundation in electronics and communication with a passion for problem-solving, teamwork, and continuous learning.

TECHNICAL SKILLS

• Programming Languages: Python, Machine Learning

• Tools & Technologies: Xilinx, GitHub, Stream lit, Flask, Docker, Kubernets

• Web Technologies: HTML, CSS, Basics of UI/UX

• Data Science Tools: Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn.

• Machine Learning: Linear Regression, Decision Tree, Random Forest,Logistic Regression

• Soft Skills: Communication, Teamwork, Problem Solving

• Languages: English, Telugu, Hindi

PROFESSIONAL EXPERIENCE

Software Engineer

Lyros Technologies Pvt. Ltd. – Hyderabad, India

Feb 2025 – Present

• Collaborated on the design and implementation of AI/ML models for real-time project deployment.

• Gained hands-on experience with Python, Machine Learning and project collaboration using GitHub, Streamlit, Docker.

• Participated in team discussions and software development lifecycle activities.

• Practiced and implemented industry-level software engineering principles.

mailto:madhusekhar.shavala21@gmail.comPROJECTS

Zomato Restaurant Rating Prediction :-

Developed an end-to-end machine learning pipeline using **Pandas, Seaborn, and Scikit-learn** to predict restaurant ratings from real-world Zomato dataset.

- Conducted detailed **Exploratory Data Analysis (EDA)** to understand customer behavior and cuisine preferences.
- Applied **feature engineering** on categorical and geospatial data (like city, cuisines, location).
- Trained and evaluated multiple models including **Random Forest** and **Linear Regression**, achieving over **85% accuracy**.
- Visualized key features affecting restaurant ratings using **Seaborn heatmaps** and **Plotly charts**.

Student Grading System :-

Created a GUI-based internal tool using **Python and Tkinter**, enabling efficient student grade management for teachers and admins.

- Integrated **modular OOP design** for better maintainability and scalability.
- Enabled secure login system for **admin and faculty roles**.
- Managed subjects, grades, student records with data validation using **NumPy and Pandas**.
- Future-ready architecture designed to support **ML integration** for automated grading and analytics.

Student Performance Prediction :-

Developed a **real-time Streamlit application** that predicts student final scores based on attendance and test data.

- Trained multiple regression models including **Linear, Polynomial, Decision Tree, and Random Forest Regression**.
- Created interactive **matplotlib and seaborn visualizations** for score trend comparison.
- Implemented **CSV export** of results and **batch prediction** feature for classroom evaluation.
- Deployed model using **Streamlit sharing**, made mobile responsive with enhanced UI/UX and Lottie animations.

Tax Calculator :-

Built a dynamic **Streamlit-based Indian income tax calculator** that supports both **Old and New tax regimes**.

- Designed an intuitive form with validation using sliders and dropdowns.
- Implemented tax logic using **Python dictionaries, conditionals, and modular functions**.
- Integrated real-time **summary cards** and **Plotly bar charts** for visual tax breakdown.
- Added export functionality to **PDF and CSV**, and styled UI with custom CSS for a professional look.

ACADEMIC PROJECT

Multipurpose Crosstalk Noise Avoidance in ASIC Design

• Implemented Test Adaptive Shielding (TAS) to reduce crosstalk noise in ASIC circuits.

• Researched electromagnetic coupling effects and optimized shielding for VLSI systems.

• Used Xilinx for simulation, testing, and design validation, improving performance and reducing hardware cost.

EDUCATION

Bachelor of Technology – Electronics & Communication Engineering

G. Pullaiah College of Engineering & Technology, Kurnool

Graduation: April 2024 | Final Grade: 5.8 CGPA

Intermediate – MPC

Sri Chaitanya Junior College, Kurnool

Completion: April 2017 | Final Grade: 77.4%

SSC – Secondary School Certificate

Bala Bharathi High School, Kurnool

Completion: April 2015 | Final Grade: 8.7 CGPA

DECLARATION

I hereby declare that the above-mentioned information is true and correct to the best of my knowledge.